

## **Abstract Of The Disclosure**

A heterogeneous telecommunications system employs "out of band" signalling to automatically discover the identity of the two ports connecting two network elements through a specific link. Either of the connected network elements may be a circuit switching network element or a packet switching network element. One network element initiates the port discovery process and transmits an overhead signal, such as a SONET/SDH protection switching message, to the network element attached at the other end of the link. The other network element monitors the status of its ports and, when it detects a change in state at one of the ports, resulting from the first network element's transmissions, the receiving, or passive, network element recognizes the port as the port which forms a part of the link of interest. Each group of network elements, packet switching and circuit switching, elects a network element leader which coordinates requests for port identification.